

NOTICE OF ACCEPTANCE (NOA)

www.maimidade.gov/buildingcode

CGI Windows & Doors
10100 NW 25 Street
Miami, FL 33172

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code. This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series 360 Aluminum Single Hung Window – L.M.I.

APPROVAL DOCUMENT: Drawing No. **W05-04**, titled "Aluminum Single Hung Window - L.M.I.", sheets 1 through 10 of 10, dated 01/28/05 with revision B dated 08/07/08, prepared by Al-Farooq Corporation, signed and sealed by Humayoun Farooq, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. This NOA revises NOA # **05-0215.02** and consists of this page 1 and evidence page E-1, as well as approval document mentioned above.

The submitted documentation was reviewed by **Manuel Pérez, P.E.**



A handwritten signature in black ink, appearing to be "MP".

NOA No. 08-0715.15
Expiration Date: May 05, 2010
Approval Date: September 04, 2008
Page 1

CGI Windows & Doors

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No **W05-04**, titled "Aluminum Single Hung Window-L.M.I.", Sheets 1 through 10 of 10, dated 01/28/05 with revision B dated 08/07/08, prepared by Al-Farooq Corporation, signed and sealed by Humayoun Farooq, P.E.

B. TESTS

1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Large Missile Impact Test per FBC, TAS 201-94
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
6) Forced Entry Test, per FBC 2411.3.2.1 (b) and TAS 202-94

Along with marked-up drawings and installation diagram of aluminum single hung windows, prepared by Hurricane Test Laboratory, LLC, Test Report No. **HTL-0080-0323-04, specimens 1, 2, 3, 4, 5, 6, 7, & 9** dated 03/29 to 04/02/04, signed and sealed by Vinu J. Abraham, P.E. (*Submitted under previous NOA #05-0215.02*)

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC-2004 and 2007, prepared by Al-Farooq Corporation, dated 07/02/08, signed and sealed by Humayoun Farooq, P.E.
Complies with ASTM E1300-02/04

D. QUALITY ASSURANCE

1. Miami Dade Building Code Compliance Office (BCCO).

E. MATERIAL CERTIFICATIONS

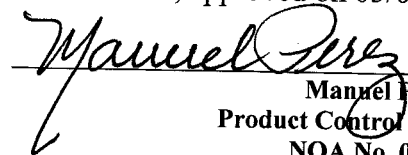
1. Notice of Acceptance No. **08-0206.01** issued to Solutia Inc. for their "Saflex HP Glass Interlayer" dated 04/17/08, expiring on 04/14/13.
2. Notice of Acceptance No. **08-0520.08** issued to Solutia Inc. for their "Vanceva Composites Glass Interlayer" dated 07/17/08, expiring on 12/11/13.

F. STATEMENTS

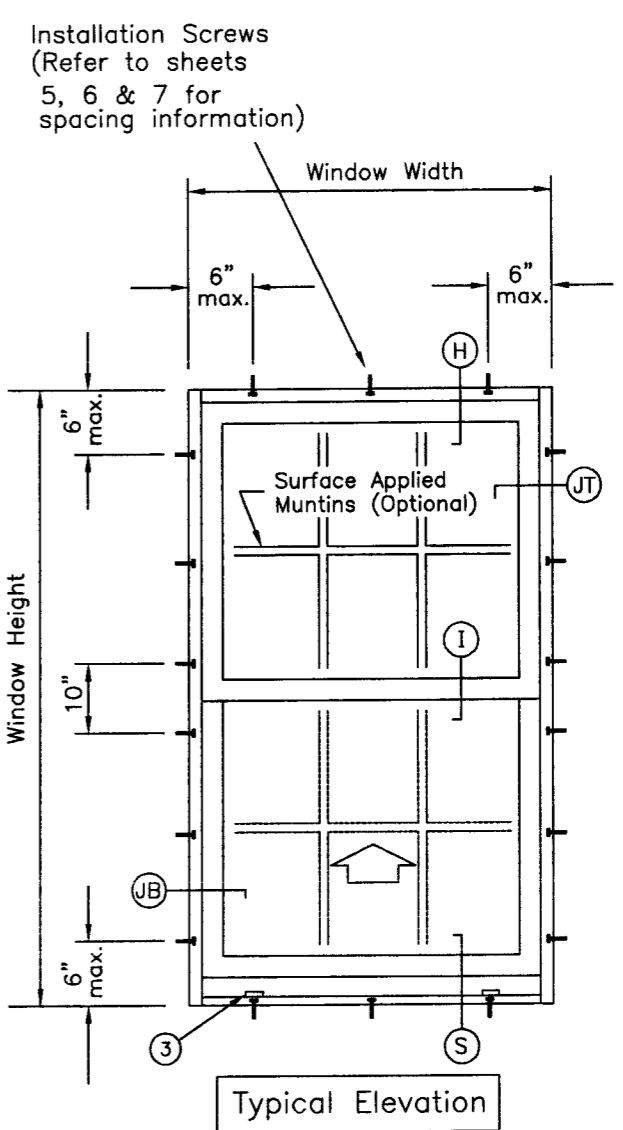
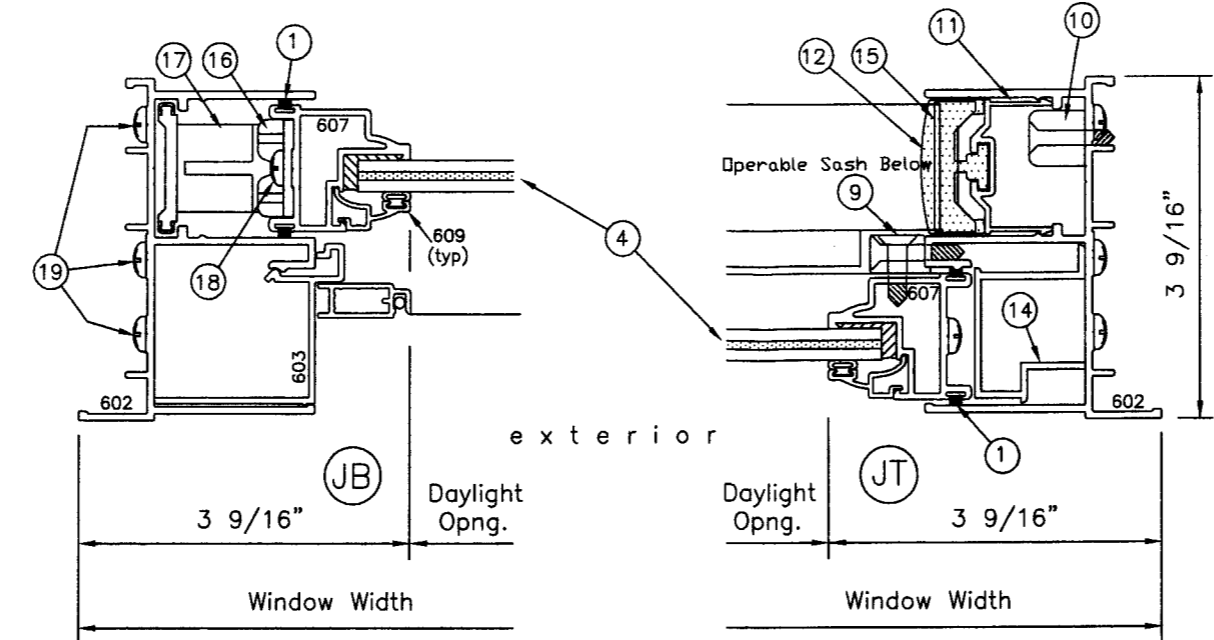
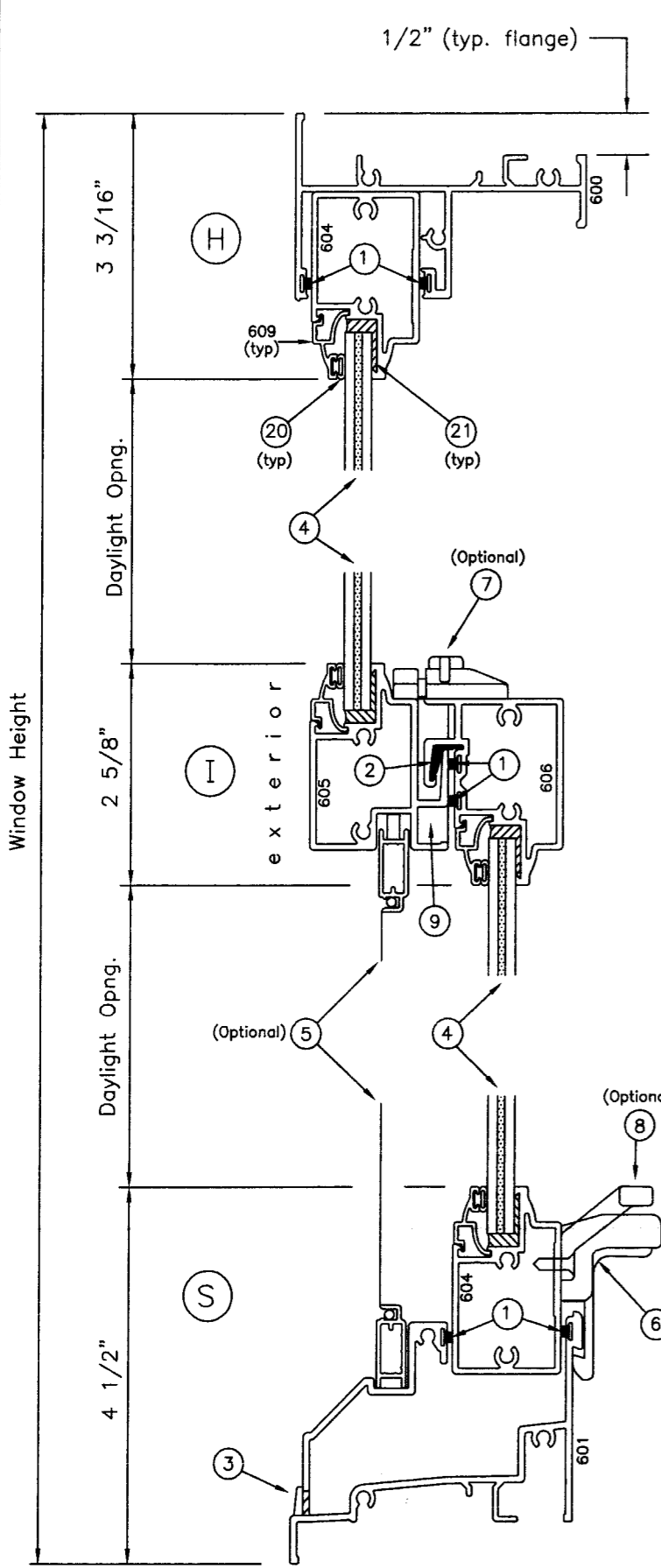
1. Statement letter of conformance and no financial interest, dated July 2, 2008, signed and sealed by Humayoun Farooq, P.E.
2. Laboratory compliance letter for Test Report no. **HTL-0080-0323-04**, issued by Hurricane Test Laboratory, LLC, dated April 02, 2004, signed and sealed by Vinu J. Abraham, P.E.

G. OTHERS

1. Notice of Acceptance No. **05-0215.02**, issued to Construction Glass Industries for their Series 360 Aluminum Single Hung Window - L.M.I., approved on 05/05/05 and expiring on 05/05/10.


Manuel Pérez, P.E.
Product Control Examiner
NOA No. 08-0715.15
Expiration Date: May 05, 2010
Approval Date: September 04, 2008

General Window Sections



Installation Screws
(Refer to sheets
5, 6 & 7 for
spacing information)

INSTRUCTIONS FOR USING CAPACITY CHARTS:

- STEP 1 DETERMINE THE REQUIRED DESIGN PRESSURES FOR A GIVEN WINDOW OPENING.
- STEP 2 DETERMINE THE CAPACITY OF THE WINDOW SIZE/CONFIGURATION/GLASS TYPE FROM CHARTS ON SHEETS 3 AND 4.
- STEP 3 DETERMINE THE ANCHOR CAPACITY FROM SHEET 7 FOR SINGLE OPENINGS, APPLICABLE TO ANCHORS TYPE A, B OR C SHOWN ON SHEETS 5 AND 6.
- STEP 4 IF ALUMINUM BUCKS ARE USED, VERIFY THE BUCK INSTALLATION CAPACITY FROM SHEET 9.
- STEP 5 FOR UNCLIPPED MULLED WINDOWS DETERMINE MULLION/MULLION ANCHORS CAPACITY FOR 1X4 TUBE MULLION FROM CHARTS ON SHEET 8.
- STEP 6 IF ALUMINUM BUCKS ARE USED DETERMINE BUCK ANCHORING REQUIREMENTS FROM CHARTS ON SHEET 10.

THE LOWEST SELECTED VALUE APPLY TO THE INSTALLATION AND MUST EQUAL OR EXCEED THE REQUIRED DESIGN PRESSURES OBTAINED FROM STEP 1.

ALUMINUM SINGLE HUNG WINDOWS

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF S.H./S.H. OR SINGLE HUNG WITH OTHER MIAMI-DADE COUNTY APPROVED WINDOWS USING MIAMI-DADE COUNTY APPROVED MULLIONS IN BETWEEN. LOWER DESIGN PRESSURE FROM WINDOWS OR MULLION APPROVAL WILL APPLY TO ENTIRE SYSTEM.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE 2004/2007 EDITION INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.

ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS, ANCHORS EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

ANCHORING OR LOADING CONDITIONS NOT SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.

A LOAD DURATION INCREASE IN ALLOWABLE STRESS IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF 2004/2007 FLORIDA BLDG. CODE SECTION 2003.8.4.

Optional 15 PSF Water Bar Adaptor
Can not be used with lock type ⑥

THESE WINDOWS ARE RATED FOR LARGE MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.

Engr: DR. HUMAYOUN FAROOQ
STRUCTURES
FLA. PE # 18557
C.A.N. 3538

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 08-0715.15
Expiration Date 05/05/2010

AUG 08 2008

By: _____
Miami Dade Product Control
Division

afC
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
COMP-ANL\W005-04CGI

ALUMINUM SINGLE HUNG WINDOW (L.M.I.)
CGI WINDOWS & DOORS
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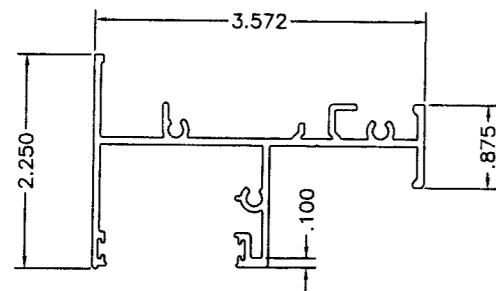
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B	08.07.08	REV. PER BCCO COMMENTS

revisions:

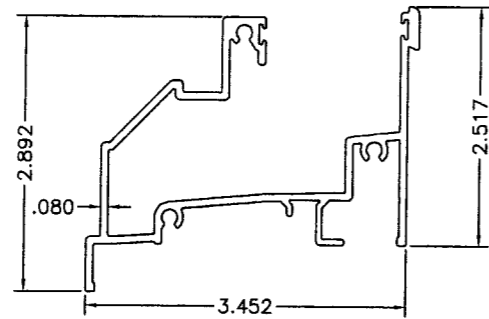
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drawing no.
W05-04

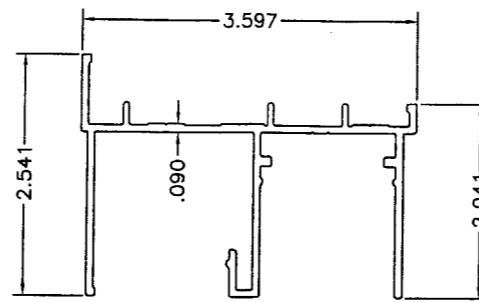
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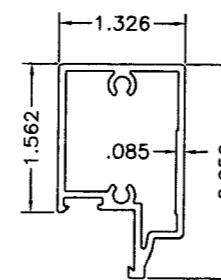
600-Frame Head
6063-T6



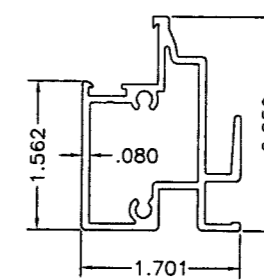
601-Frame Sill
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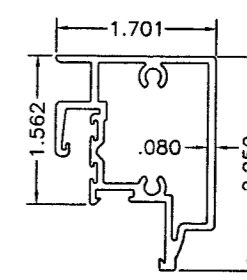
602-Frame Jamb
6063-T6



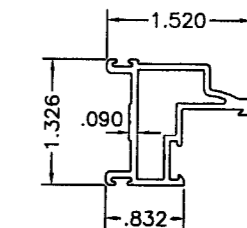
604-Horiz. Rail
6063-T6



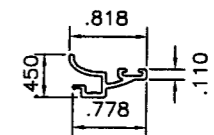
605-Fixed Intclk.
6063-T6



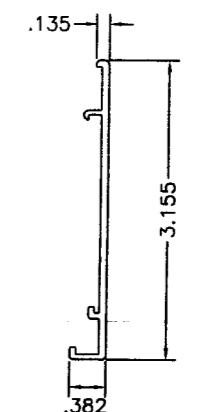
606-Moving Intclk.
6063-T6



607-Side Rail
6063-T6



609-Glzg. Bead
6063-T5



611-Waterbar
6063-T5

Bill of Materials

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 08-0715.15
Expiration Date 05/05/2010
By Manuel Pray
Miami Code Product Control
Division

Item No.	Part No.	Quantity	Description	Material	Manufacturer / Supplier	Remarks
1	W23201NG	As Req'd.	Wool Pile with Center Soft Fin (Gray)	Pile	Ultrafab Inc.	
2	CGI-612P	As Req'd.	Plastic Bumper Guide	PVC	Prototype Plastic Extrusions	Continuous at interlock
3	#146-4	2	Weep Hole Cover	Nylon	Builders Plastic Company	
4	N/A	As Req'd.	5/16" thick laminated glass (see Glazing details for make-ups approved)	Glass/PVB	Varies	Ann/Ann or HS/HS
5	N/A	1	Complete Screen	Alum/Mesh		
6	CGI-615C & 616C	1 or 2	Combination Egress Lock and Lift/Pull attached with (2) #8 x 5/8" FH SMS	Zinc	Custom made for CGI	1 @ wdw's. 28" wide and smaller / 2 @ wdw's. over 28" wide
7	A30700 & C30705	1 or 2	Optional Sweep Lock & Keeper (Replaces Item 6) attached with (4) #6 x 5/8" FH SMS	Zinc	Truth Hardware	1 @ wdw's. 28" wide and smaller / 2 @ wdw's. over 28" wide
8	18-11-XX-100	1 or 2	Optional Lift/Pull (Replaces Item 6) attached with (2) #8 x 5/8" FH SMS	Zinc	Truth Hardware	1 @ wdw's. 28" wide and smaller / 2 @ wdw's. over 28" wide
9	CGI-614C	2	Tie Down Block	Zinc	Custom made for CGI	w/ (2) #10 x 3/4" FH SMS into sash & (3) #8 x 1" FH SMS into frame
10	Varies	2	Block & Tackle Tilt or Spiral Balance	Varies	Varies	Both balances can be used
11	CGI-617P	2	Balance Cover	PVC	Prototype Plastic Extrusions	Located at top half of each jamb
12	CGI-618P	2	Vent Stop	PVC	Prototype Plastic Extrusions	Located at top of jambs
14	CGI-613P	2	Fixed Vent Shim	PVC	Prototype Plastic Extrusions	Located at top of fixed vent
15	CGI-619N	2	Top Guide at Operable Vent	Nylon	Custom made for CGI	
16	CGI-622N	2	Bottom Guide/Clip at Operable Vent	Nylon	Custom made for CGI	
17	CGI-620C & 621N	2	Carrier System	Zinc	Custom made for CGI	Optional - Balance attaches to it
18	N/A	16	Vent Assembly Screws	S/S	Varies	#10 x 1 1/4" PH SMS (2 per corner)
19	N/A	12	Frame Assembly Screws	S/S	Varies	#10 x 1 1/4" PH SMS (3 per corner)
20	CGI-382V	As Req'd.	Vinyl Bulb	PVC	Prototype Plastic Extrusions	
21	GE-1200	As Req'd.	Structural Silicone	Silicone	3 Silicones	GE-1200, GE-2000, DOW-995

afC
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COMP-ANL\W005-04CGI

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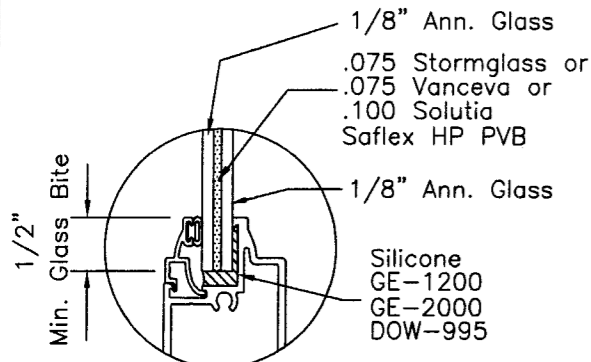
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Engr: DR. HUMAYOUN FAROOQ
STRUCTURES
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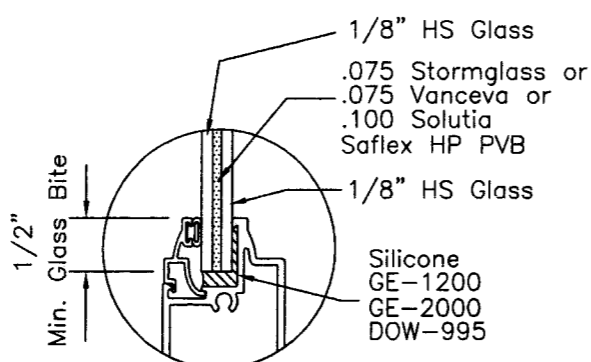
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chk. by: -

AUG 08 2008

drawing no.
W05-04
sheet 2 of 10



Glass Type "1"
5/16" Nominal Glass
Annealed/Annealed



Glass Type "2"
5/16" Nominal Glass
HS/HS

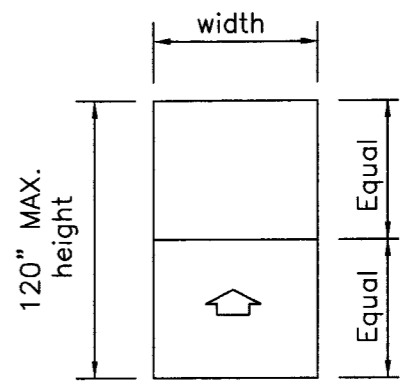
Supplemental Test Results for:
Air Infiltration - Water Leakage Resistance - Forced Entry

Test Type and Method	Results
Air Infiltration Test (ASTM-E283) @ 1.57 psf pressure differential @ 6.24 psf pressure differential	PASSED (.044 C.F. / Min / Sq Ft) PASSED (.076 C.F. / Min / Sq Ft)
Water Leakage Test (ASTM-E331) without waterbar adaptor with waterbar adaptor	No leakage allowed PASSED @ 12.0 PSF PASSED @ 15.0 PSF
Forced Entry Resistance test (ASTM F588 & Grade 10)	PASSED

EQUAL LITES WINDOWS					
DESIGN LOAD CAPACITY - PSF					
WINDOW DIMS.		GLASS TYPE '1'		GLASS TYPE '2'	
WIDTH	HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
24"	48"	100.0	210.0	100.0	210.0
30"		100.0	210.0	100.0	210.0
32"		100.0	210.0	100.0	210.0
36"		100.0	180.0	100.0	210.0
42"		100.0	144.0	100.0	210.0
48"		100.0	120.0	100.0	200.0
54"	100.0	102.9	100.0	171.4	
24"	60"	100.0	210.0	100.0	210.0
30"		100.0	199.7	100.0	210.0
32"		100.0	190.3	100.0	210.0
36"		100.0	164.3	100.0	210.0
42"		100.0	128.0	100.0	210.0
48"		100.0	104.7	100.0	120.0
54"	88.6	88.6	100.0	120.0	
24"	72"	100.0	201.1	100.0	210.0
30"		100.0	162.1	100.0	210.0
32"		100.0	167.6	100.0	210.0
36"		100.0	150.7	100.0	210.0
42"		100.0	120.0	100.0	120.0
48"		96.0	96.0	100.0	120.0
54"	80.0	80.0	100.0	120.0	
24"	84"	100.0	179.1	100.0	210.0
30"		100.0	143.4	100.0	210.0
32"		100.0	135.3	100.0	210.0
36"		100.0	120.0	100.0	120.0
42"		100.0	106.1	100.0	120.0
48"		85.6	85.6	100.0	120.0
54"	74.8	74.8	100.0	120.0	

EQUAL LITES WINDOWS					
DESIGN LOAD CAPACITY - PSF					
WINDOW DIMS.		GLASS TYPE '1'		GLASS TYPE '2'	
WIDTH	HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
24"	96"	100.0	161.9	100.0	210.0
30"		100.0	118.8	100.0	120.0
32"		100.0	111.9	100.0	120.0
36"		100.0	101.5	100.0	120.0
42"		85.4	85.4	100.0	120.0
48"		76.2	76.2	100.0	120.0
54"	68.9	68.9	100.0	120.0	
24"	108"	100.0	142.4	100.0	210.0
30"		100.0	102.2	100.0	120.0
32"		94.9	94.9	100.0	120.0
36"		85.9	85.9	100.0	120.0
42"		75.3	75.3	100.0	120.0
48"		68.6	68.6	100.0	120.0
24"	120"	100.0	120.0	100.0	120.0
30"		90.7	90.7	100.0	120.0
32"		83.6	83.6	100.0	120.0
36"		75.9	75.9	100.0	120.0
42"		66.4	66.4	100.0	120.0

EQUAL LITES WINDOWS					
DESIGN LOAD CAPACITY - PSF					
WINDOW DIMS.		GLASS TYPE '1'		GLASS TYPE '2'	
WIDTH	HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
19-1/8"	26"	100.0	210.0	100.0	210.0
26-1/2"		100.0	210.0	100.0	210.0
37"		100.0	210.0	100.0	210.0
53-1/8"		100.0	171.1	100.0	210.0
19-1/8"	38-3/8"	100.0	210.0	100.0	210.0
26-1/2"		100.0	210.0	100.0	210.0
37"		100.0	197.2	100.0	210.0
53-1/8"		100.0	124.1	100.0	206.9
19-1/8"	50-5/8"	100.0	210.0	100.0	210.0
26-1/2"		100.0	210.0	100.0	210.0
37"		100.0	168.3	100.0	210.0
53-1/8"		100.0	101.2	100.0	168.7
19-1/8"	63"	100.0	210.0	100.0	210.0
26-1/2"		100.0	207.5	100.0	210.0
37"		100.0	154.9	100.0	210.0
53-1/8"		88.1	88.1	100.0	120.0
19-1/8"	72"	100.0	210.0	100.0	210.0
26-1/2"		100.0	181.5	100.0	210.0
37"		100.0	146.8	100.0	210.0
53-1/8"		82.0	82.0	100.0	120.0
19-1/8"	76"	100.0	210.0	100.0	210.0
26-1/2"		100.0	171.4	100.0	210.0
37"		100.0	136.6	100.0	210.0
53-1/8"		80.0	80.0	100.0	120.0



Equal Lite Window

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 08-0715-15
Expiration Date 05/05/2010
By *Manuel P...*
Miami Data Product Control
Division

Engr: DR. HUMAYOUN FAROOQ
STRUCTURES
FLA. PE # 16557
C.A.N. 3538

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE
BASED ON ASTM E1300-02/04 (3 SEC. GUSTS)
AND FLORIDA BUILDING COMMISSION
DECLARATORY STATEMENT DCA05-DEC-219

All values shown are Design PSF (Pounds per Square Foot)

VALUES FOR EXTERIOR LOADS(+) SHOWN ARE
FOR SILL WITH WATERBAR ADAPTER
FOR WINDOWS WITHOUT WATERBAR ADAPTER
LIMIT EXTERIOR(+) LOADS TO 80.0 PSF

AUG 08 2008

afC
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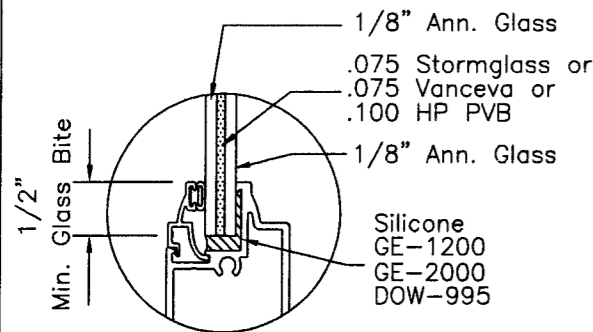
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NO.	DATE	BY	DESCRIPTION
A	07.02.08		UPDATED FOR 2007 FBC
B	08.07.08		NO CHANGE THIS SHEET

revisions:

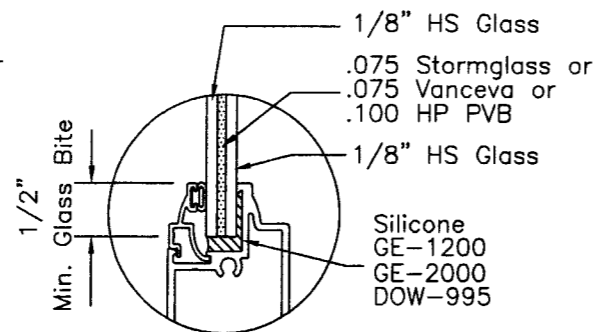
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scale: -
dr. by: -
chk. by: -

drawing no. W05-04
sheet 3 of 10



Glass Type "1"

5/16" Nominal Glass
Annealed/Annealed



Glass Type "2"

5/16" Nominal Glass
HS/HS

Supplemental Test Results for:
Air Infiltration - Water Leakage Resistance - Forced Entry

Test Type and Method	Results
Air Infiltration Test (ASTM-E283) @ 1.57 psf pressure differential @ 6.24 psf pressure differential	PASSED (.044 C.F. / Min / Sq Ft) PASSED (.076 C.F. / Min / Sq Ft)
Water Leakage Test (ASTM-E331) without waterbar adaptor with waterbar adaptor	No leakage allowed PASSED @ 12.0 PSF PASSED @ 15.0 PSF
Forced Entry Resistance test (ASTM F588 & Grade 10)	PASSED

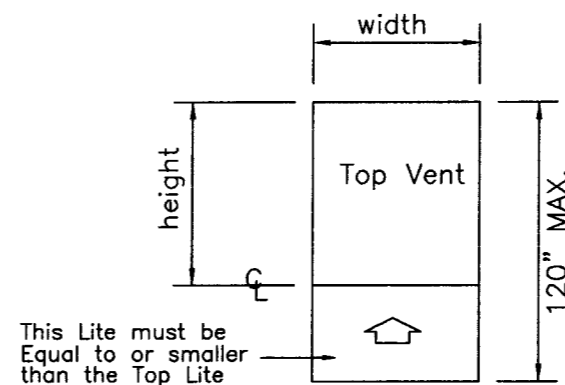
UNEQUAL LITES WINDOWS (ORIEL)								
DESIGN LOAD CAPACITY - PSF								
WINDOW DIMS.		TOP VENT HEIGHT	GLASS TYPE '1'		GLASS TYPE '2'			
WIDTH	HEIGHT		EXT.(+)	INT.(-)	EXT.(+)	INT.(-)		
24"	96" (MAX.)	48"	100.0	161.9	100.0	210.0		
30"			100.0	118.8	100.0	120.0		
32"			100.0	111.9	100.0	120.0		
36"			100.0	101.5	100.0	120.0		
42"			85.4	85.4	100.0	120.0		
48"			76.2	76.2	100.0	120.0		
54"			68.9	68.9	100.0	120.0		
24"	108" (MAX.)	54"	100.0	142.4	100.0	210.0		
30"			100.0	102.2	100.0	120.0		
32"			94.9	94.9	100.0	120.0		
36"			85.9	85.9	100.0	120.0		
42"			75.3	75.3	100.0	120.0		
48"			68.6	68.6	100.0	120.0		
24"			120" (MAX.)	60"	100.0	120.0	100.0	120.0
30"	90.7	90.7			100.0	120.0		
32"	83.6	83.6			100.0	120.0		
36"	75.9	75.9			100.0	120.0		
42"	66.4	66.4			100.0	120.0		
24"	120" (MAX.)	66"			100.0	120.0	100.0	120.0
30"					81.7	81.7	100.0	120.0
32"			77.7	77.7	100.0	120.0		
36"			67.4	67.4	100.0	120.0		
24"			120" (MAX.)	72"	100.0	113.6	100.0	120.0
30"					77.1	77.1	100.0	120.0
32"					70.1	70.1	100.0	120.0
36"	60.3	60.3			100.0	120.0		
24"	120" (MAX.)	78"			100.0	120.0	100.0	120.0
30"					71.2	71.2	100.0	120.0
32"					63.8	63.8	100.0	120.0
24"			120" (MAX.)	84"	100.0	120.0	100.0	120.0
30"					66.6	66.6	100.0	120.0

UNEQUAL LITES WINDOWS (ORIEL)								
DESIGN LOAD CAPACITY - PSF								
WINDOW DIMS.		TOP VENT HEIGHT	GLASS TYPE '1'		GLASS TYPE '2'			
WIDTH	HEIGHT		EXT.(+)	INT.(-)	EXT.(+)	INT.(-)		
19-1/8"	96" (MAX.)	48"	100.0	210.0	100.0	210.0		
26-1/2"			100.0	138.5	100.0	210.0		
37"			99.3	99.3	100.0	120.0		
53-1/8"			69.8	69.8	100.0	120.0		
19-1/8"	108" (MAX.)	54"	100.0	210.0	100.0	210.0		
26-1/2"			100.0	120.0	100.0	120.0		
37"			83.6	83.6	100.0	120.0		
19-1/8"			120" (MAX.)	60"	100.0	210.0	100.0	210.0
26-1/2"	100.0	108.6			100.0	120.0		
37"	73.7	73.7			100.0	120.0		
19-1/8"	120" (MAX.)	66"			100.0	210.0	100.0	210.0
26-1/2"			99.5	99.5	100.0	120.0		
37"			65.7	65.7	100.0	120.0		
19-1/8"			120" (MAX.)	72"	100.0	210.0	100.0	210.0
26-1/2"	93.9	93.9			100.0	120.0		
19-1/8"	120" (MAX.)	78"			100.0	120.0	100.0	120.0
26-1/2"					88.0	88.0	100.0	120.0
19-1/8"			120" (MAX.)	84"	100.0	120.0	100.0	120.0
26-1/2"					79.8	79.8	100.0	120.0

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE
BASED ON ASTM E1300-02/04 (3 SEC. GUSTS)
AND FLORIDA BUILDING COMMISSION
DECLARATORY STATEMENT DCA05-DEC-219

All values shown are Design PSF (Pounds per Square Foot)

VALUES FOR EXTERIOR LOADS(+) SHOWN ARE
FOR SILL WITH WATERBAR ADAPTER
FOR WINDOWS WITHOUT WATERBAR ADAPTER
LIMIT EXTERIOR(+) LOADS TO 80.0 PSF



Unequal Lite Window

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 08-0715.15
Expiration Date 05/05/2010
By *Manuel Diaz*
Miami Dade Product Control
Division

Engr: DR. HUMAYDUN FAROOQ
STRUCTURES
FLA. PE # 16557
C.A.N. 3538

AUG 08 2008

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AL-FAROOQ CORPORATION
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COMP-ANL\W005-04CGI

ALUMINUM SINGLE HUNG WINDOW (L.M.I.)

CGI WINDOWS & DOORS
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MIAMI, FL. 33172
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no.	date	description
A	07.02.08	UPDATED FOR 2007 FBC
B	08.07.08	NO CHANGE THIS SHEET

revisions:

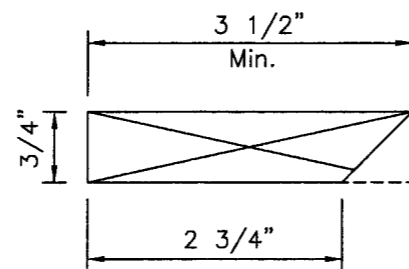
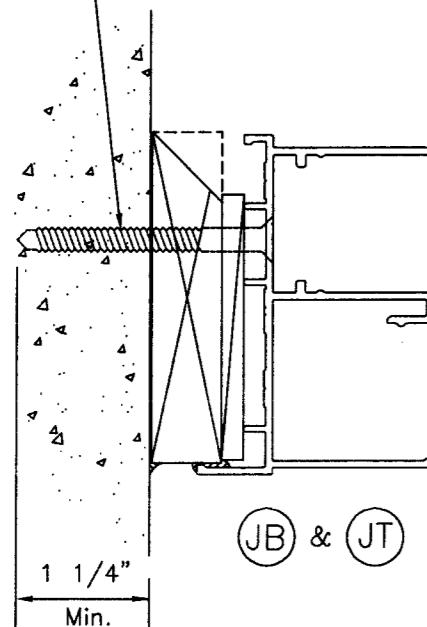
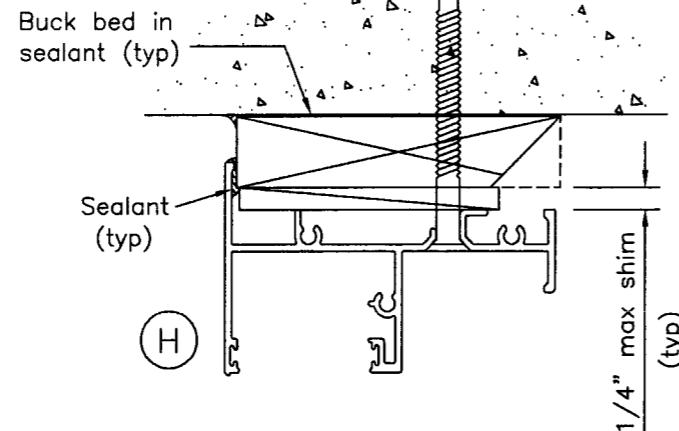
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scale: -
dr. by: -
chk. by: -

drawing no. W05-04
sheet 4 of 10

Installation Type "A"

w/ 1 x 4 Beveled P.T. Wood Buck

1/4" Dia. Flat Head Tap-Con Screws (or equal)



1 x 4 Beveled P.T. Wood Buck (typ.)

IMPORTANT NOTE:
Wood Bucks must sustain loads imposed by glazing system and transfer them to the building structure.

TYPICAL ANCHORS: SEE ELEV. FOR SPACING
 1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)
 1/4" DIA. HILTI KWIK-CON II (Fu=163 KSI, Fy=157 KSI)
 INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
 1-1/2" MIN. PENETRATION INTO WOOD
 THRU 1BY BUCKS INTO CONC. OR MASONRY
 1-1/4" MIN. EMBED INTO CONC. OR MASONRY
 DIRECTLY INTO CONC. OR MASONRY
 1-3/8" MIN. EMBED INTO CONC. OR MASONRY
 1/4" DIA. SELF DRILLING SCREWS (GRADE 2 CRS)
 INTO METAL STRUCTURES
 STEEL : 12 GA. MIN. (Fy = 36 KSI MIN.)
 ALUMINUM : 1/8" THK. MIN. (6063-T5 MIN.)
 (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

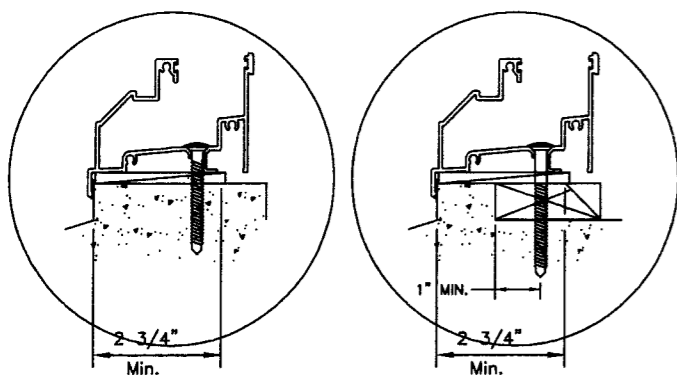
#14 SMS OR SELF DRILLING SCREWS
 INTO MIAMI-DADE COUNTY APPROVED MULLIONS (MIN. THK. = .090")
 (NO SHIM SPACE)

TYPICAL EDGE DISTANCE
 INTO CONCRETE AND MASONRY = 2-1/2" MIN.
 INTO WOOD STRUCTURE = 1" MIN.
 INTO METAL STRUCTURE = 3/4" MIN.

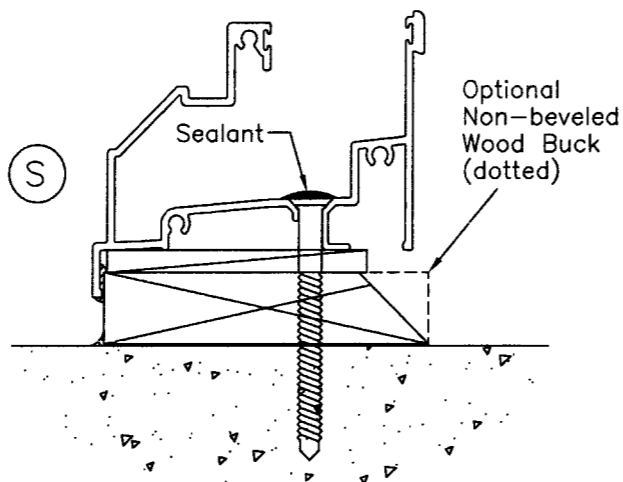
CONCRETE f'c = 3000 PSI MIN.
 MASONRY f'm = 1500 PSI MIN.

Values for Installation Type "A" apply to the following installation types, with maximum shim space 1/4":

- 1- Using 1by P.T. wood bucks, min. 5/8" thick,
- 2- Directly into masonry, without the use of wood bucks.
- 3- Directly into a steel or aluminum structure min. 1/8" thick and using #14 Teks or SMS. Structure must be designed by others to sustain the loads imposed by the window.



Optional Pre-Cast Sill



PRODUCT REVISED
 as complying with the Florida Building Code
 Acceptance No **08-0715.15**
 Expiration Date **05/05/2010**
 By *Mary Deas*
 Miami Dade Product Control Division

Engr: DR. HUMAYOUN FAROOQ
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 FLA. PE # 16557
 C.A.N. 3538

AUG 08 2008

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 COMP-ANL\W005-04CGI

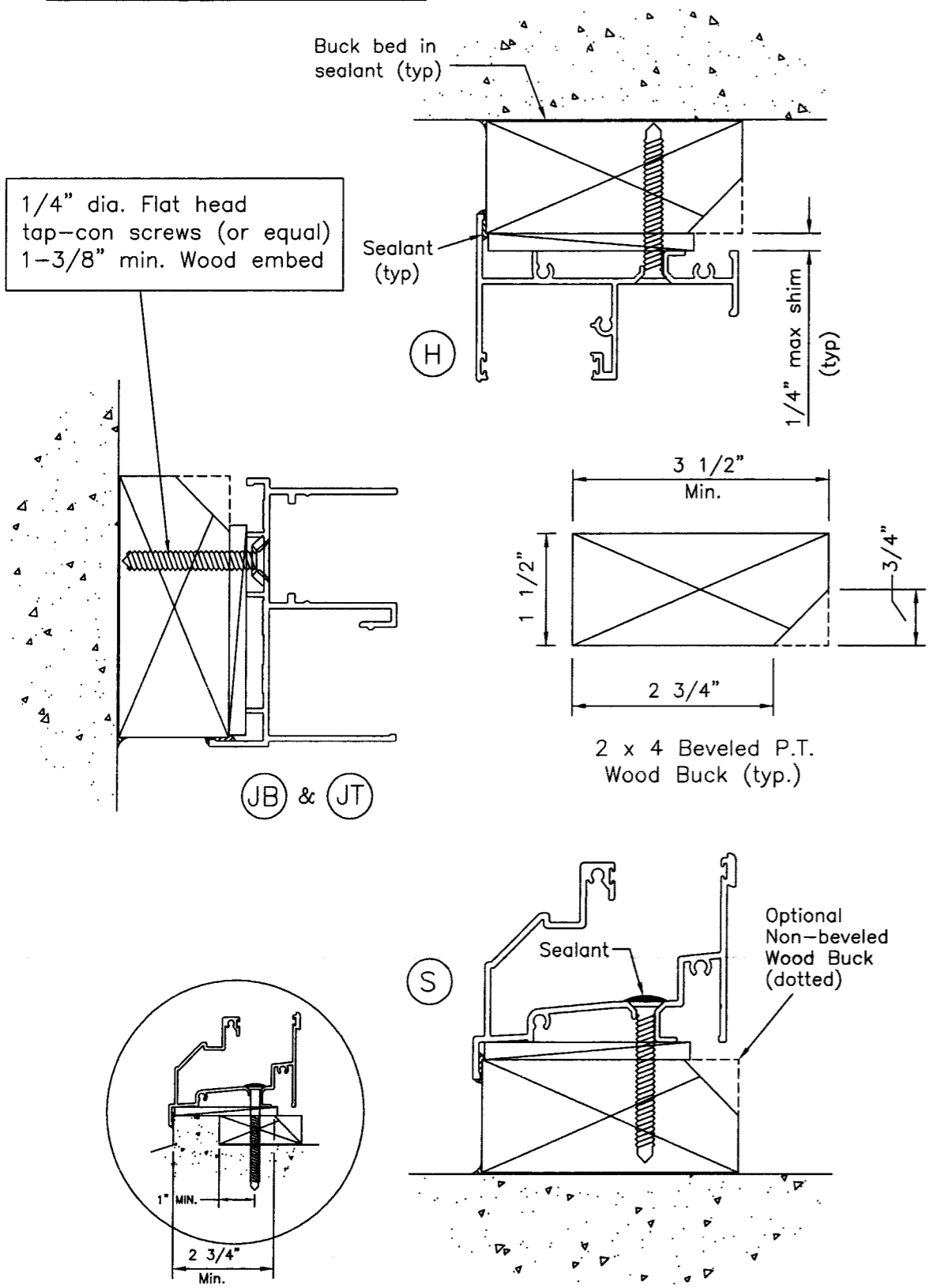
ALUMINUM SINGLE HUNG WINDOW (L.M.I.)
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revisions:	no	date	by	description
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date: 01-28-05
 scale: -
 dr. by: -
 chk. by: -
 drawing no. W05-04
 sheet 5 of 10

Installation Type "B"

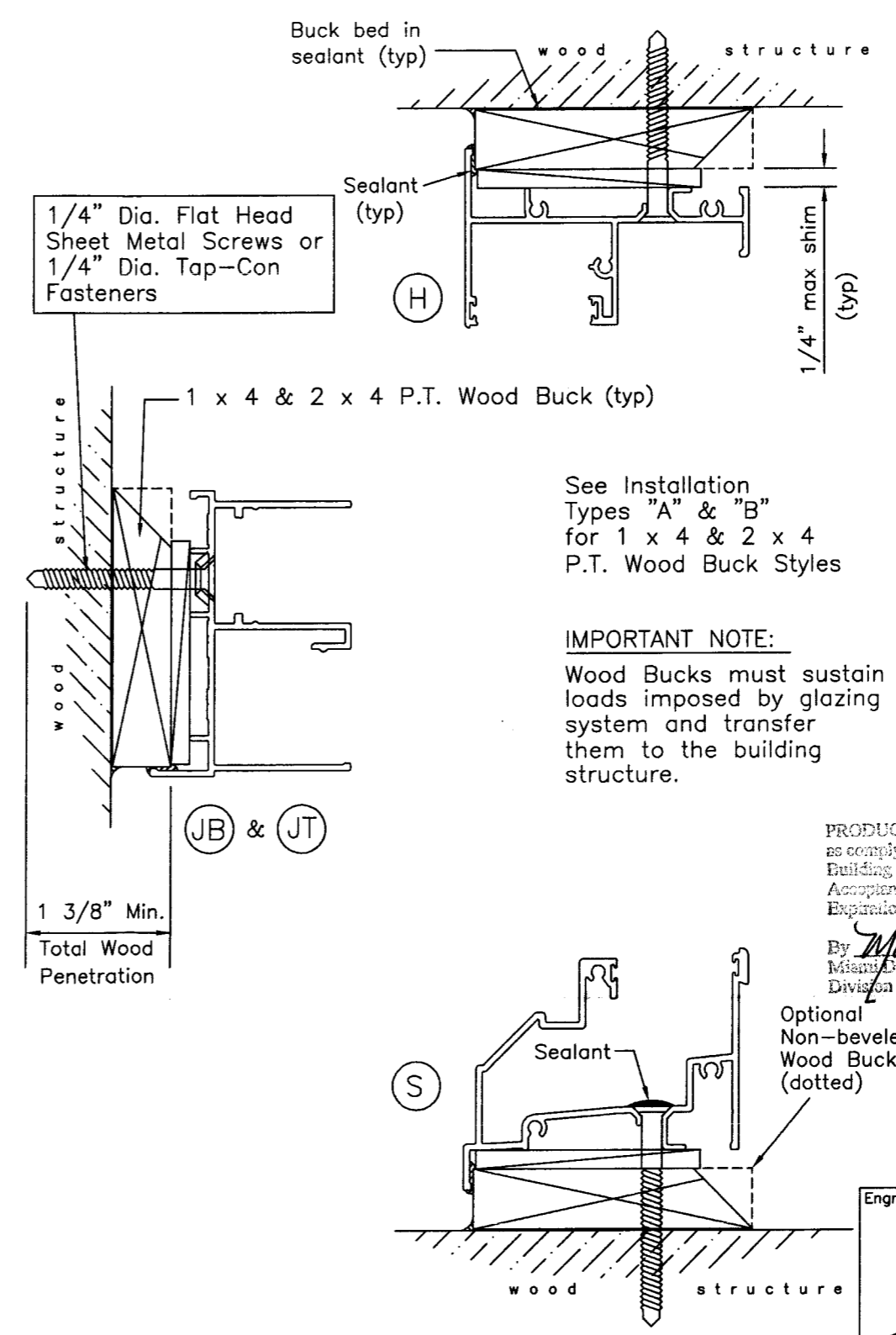
w/ 2 x 4 Beveled P.T. Wood Buck



Optional Pre-Cast Sill

Installation Type "C"

based on wood penetration only using 1 x 4 or 2 x 4 wood bucks



See Installation Types "A" & "B" for 1 x 4 & 2 x 4 P.T. Wood Buck Styles

IMPORTANT NOTE:
Wood Bucks must sustain loads imposed by glazing system and transfer them to the building structure.

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Acceptance No. 08-0715.15
Expiration Date 05/05/2010
By *Manuel P...*
Miami Code Product Control Division

Engr: DR. HUMAYUN FAROOQ
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FLA. PE # 16557
C.A.N. 3538

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B	08.07.08			REV. PER BCCO COMMENTS

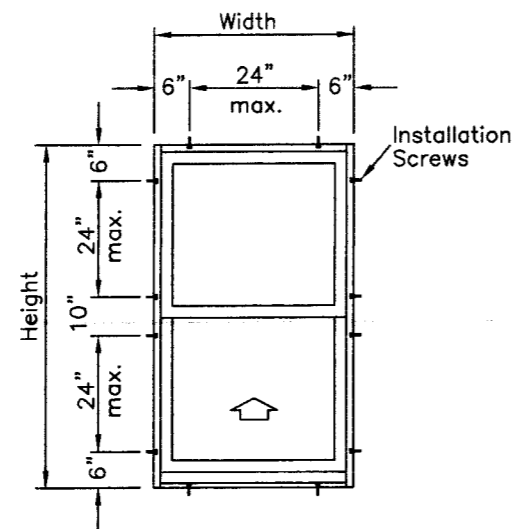
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dr. by: -
chk. by: -

drawing no. W05-04
sheet 6 of 10

ANCHORS			
DESIGN LOAD CAPACITY - PSF			
WINDOW DIMS.		NO. OF ANCHORS AT JAMB	STANDARD HOLE PATTERN EXT.(+) & INT.(-)
WIDTH	HEIGHT		
24"	48"	4	210.0
30"			210.0
32"			210.0
36"			210.0
42"			210.0
48"			205.2
54"	171.9		
24"	60"	4	210.0
30"			210.0
32"			210.0
36"			199.5
42"			178.5
48"			161.5
54"	147.5		
24"	72"	6	210.0
30"			210.0
32"			210.0
36"			210.0
42"			210.0
48"			169.6
54"	136.8		
24"	84"	6	210.0
30"			210.0
32"			210.0
36"			192.7
42"			173.1
48"			158.0
54"	129.8		
24"	96"	6	210.0
30"			188.4
32"			178.9
36"			163.1
42"			145.4
48"			132.5
54"	122.3		
24"	108"	8	210.0
30"			210.0
32"			207.4
36"			188.4
42"			167.1
48"			151.4
24"	120"	8	210.0
30"			193.8
32"			183.5
36"			166.3
42"	146.8		

ANCHORS			
DESIGN LOAD CAPACITY - PSF			
WINDOW DIMS.		NO. OF ANCHORS AT JAMB	STANDARD HOLE PATTERN EXT.(+) & INT.(-)
WIDTH	HEIGHT		
19-1/8"	26"	4	210.0
26-1/2"			210.0
37"			210.0
53-1/8"			210.0
19-1/8"	38-3/8"	4	210.0
26-1/2"			210.0
37"			210.0
53-1/8"			206.5
19-1/8"	50-5/8"	4	210.0
26-1/2"			210.0
37"			210.0
53-1/8"			170.0
19-1/8"	63"	4	210.0
26-1/2"			210.0
37"			183.7
53-1/8"			140.7
19-1/8"	72"	6	210.0
26-1/2"			210.0
37"			210.0
53-1/8"			140.7
19-1/8"	76"	6	210.0
26-1/2"			210.0
37"			208.0
53-1/8"			136.7

LOADS APPLY TO INSTALLATION TYPES A, B & C AND INTO ALUMINUM BUCKS FOR ALUMINUM BUCK INSTALLATION SEE SHEETS 9 AND 10.



CGI Standard Hole Pattern

Refer to sheets 5 & 6 of 10 for description of installation types A - B - C

Engr: DR. HUMAYOUN FAROOQ
STRUCTURES
FLA. PE # 16557
C.A.N. 3538

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Acceptance No. 08-0715.15
Expiration Date 05/05/2010

By: *Mamun Peraz*
Miami/Dade Product Control
Division

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COMP-ANL\W005-04CGI

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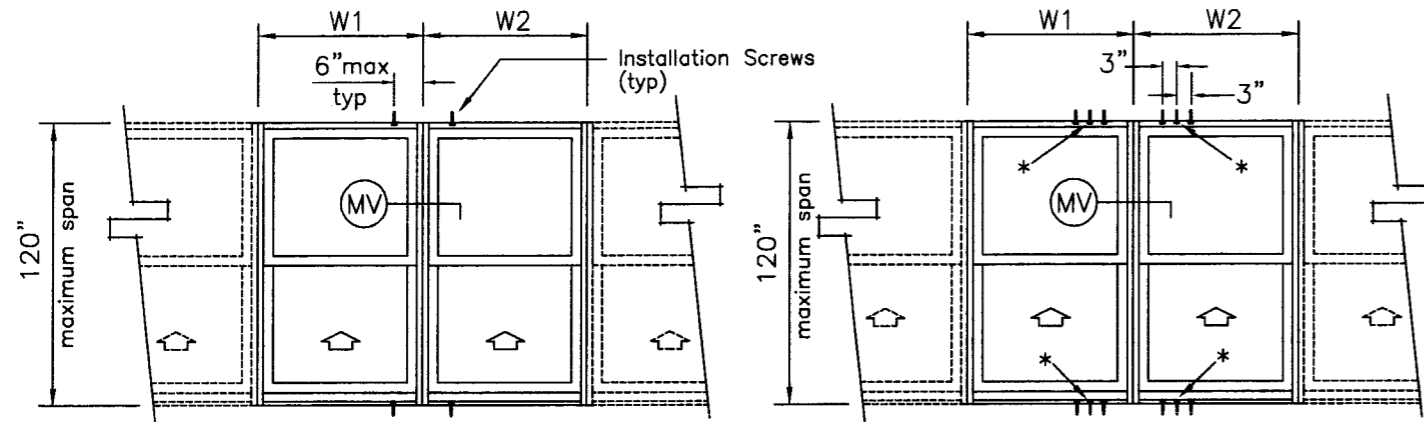
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drawing no.
W05-04
sheet 7 of 10

Vertical Mullion Performance

$$\text{Tributary Width} = \frac{W1 + W2}{2}$$

For Window Performance, refer to sheets 3 or 4



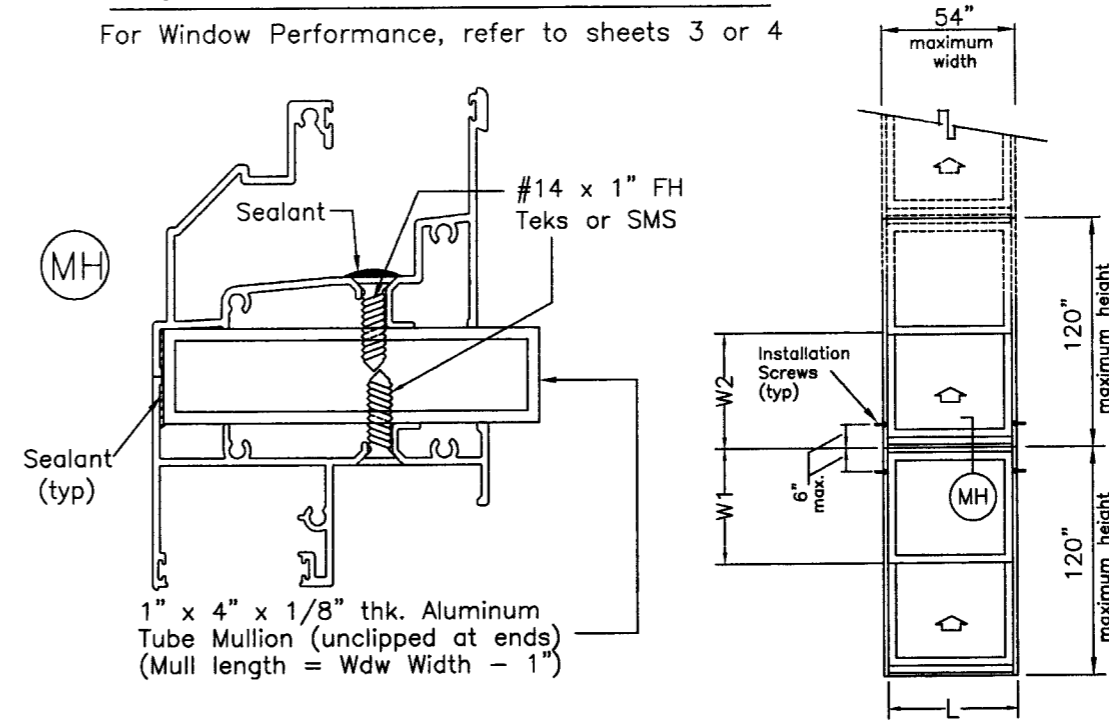
Multiple Opening
(2 or more windows)
w/ 1 screw on each side of mullion
Standard Installation

Multiple Opening
(2 or more windows)
w/ 2 or 3 screws on each side of mullion
High Load Installation

(* = additional holes to be drilled by installer)

Horizontal Mullion Performance

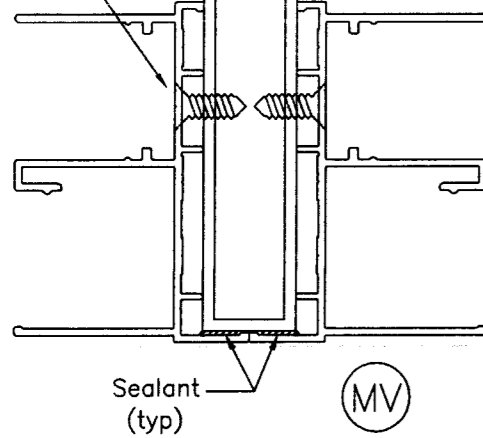
For Window Performance, refer to sheets 3 or 4



1" x 4" x 1/8" thk. Aluminum
Tube Mullion (unclipped at ends)
(Mull length = Wdw Width - 1")

1" x 4" x 1/8" thk. Aluminum
Tube Mullion (unclipped at ends)
(Mull length = Wdw Height - 1")

#14 x 3/4" FH
Teks or SMS



MULLION DESIGN LOAD CAPACITY - PSF				
WINDOW DIMS.		ONE ANCHOR EACH SIDE	TWO ANCHORS EACH SIDE	THREE ANCHORS EACH SIDE
WIDTH	HEIGHT	EXT.(+) & INT.(-)	EXT.(+) & INT.(-)	EXT.(+) & INT.(-)
24"	48"	150.0	210.0	210.0
30"		130.9	210.0	210.0
32"		126.6	210.0	210.0
36"		120.0	210.0	210.0
42"		114.5	210.0	210.0
48"		112.5	210.0	210.0
54"	112.5	210.0	210.0	
24"	60"	112.5	210.0	210.0
30"		96.0	192.0	210.0
32"		92.0	184.1	210.0
36"		85.7	171.4	210.0
42"		79.1	158.2	210.0
48"		75.0	150.0	210.0
54"	72.7	145.5	210.0	
24"	72"	90.0	180.0	210.0
30"		75.8	151.6	210.0
32"		72.3	144.6	210.0
36"		66.7	133.3	200.0
42"		60.5	121.0	181.5
48"		56.3	112.5	168.8
54"	53.3	106.7	160.0	
24"	84"	75.0	150.0	210.0
30"		62.6	125.2	172.5
32"		59.6	119.1	162.9
36"		54.5	109.1	147.1
42"		49.0	98.0	129.7
48"		45.0	90.0	117.4
54"	42.1	84.2	108.4	

MULLION DESIGN LOAD CAPACITY - PSF				
WINDOW DIMS.		ONE ANCHOR EACH SIDE	TWO ANCHORS EACH SIDE	THREE ANCHORS EACH SIDE
WIDTH	HEIGHT	EXT.(+) & INT.(-)	EXT.(+) & INT.(-)	EXT.(+) & INT.(-)
24"	96"	64.3	128.6	140.7
30"		53.3	106.7	114.1
32"		50.6	101.2	107.6
36"		46.2	92.3	96.8
42"		41.1	82.3	84.8
48"		37.5	75.0	76.1
54"	34.8	69.6	69.6	
24"	108"	56.3	98.3	98.3
30"		46.5	79.5	79.5
32"		44.0	74.9	74.9
36"		40.0	67.2	67.2
42"		35.5	58.5	58.5
48"		32.1	52.2	52.2
24"	120"	50.0	71.4	71.4
30"		41.1	57.6	57.6
32"		38.9	54.2	54.2
36"		35.3	48.5	48.5
42"		31.2	42.2	42.2

MULLION DESIGN LOAD CAPACITY - PSF				
WINDOW DIMS.		ONE ANCHOR EACH SIDE	TWO ANCHORS EACH SIDE	THREE ANCHORS EACH SIDE
WIDTH	HEIGHT	EXT.(+) & INT.(-)	EXT.(+) & INT.(-)	EXT.(+) & INT.(-)
53-1/8"	26"	210.0	210.0	210.0
19-1/8"		210.0	210.0	210.0
26-1/2"	38-3/8"	194.6	210.0	210.0
37"		176.2	210.0	210.0
53-1/8"		176.0	210.0	210.0
19-1/8"	50-5/8"	165.0	210.0	210.0
26-1/2"		130.9	210.0	210.0
37"		109.0	210.0	210.0
53-1/8"	63"	101.1	202.3	210.0
19-1/8"		126.8	210.0	210.0
26-1/2"		98.3	196.6	210.0
37"	72"	78.7	157.4	210.0
53-1/8"		67.0	133.9	200.9
19-1/8"		108.5	210.0	210.0
26-1/2"	76"	83.2	166.5	210.0
37"		65.5	130.9	196.4
53-1/8"		53.7	107.4	161.1
19-1/8"	76"	102.0	204.0	210.0
26-1/2"		77.9	155.9	210.0
37"		60.9	121.8	182.7
53-1/8"		49.3	98.7	148.0

Engr: DR. HUMAYOUN FAROQ
STRUCTURES
FLA. PE # 165-57
C.A.N. 3538

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Acceptance No 08-0715-15
Expiration Date 05/05/2010
By *Manuel Perez*
Miami Dade Product Control
Division

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AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
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COMP-ANL\W005-04CGI

ALUMINUM SINGLE HUNG WINDOW (L.M.I.)
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no	date	by	description
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B	08.07.08		NO CHANGE THIS SHEET

date: 01-28-05
scale: -
dr. by: -
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drawing no. W05-04
sheet 8 of 10

PERFORMANCE VALUES OF ALUMINUM BUCK INSTALLATION ANCHORS
EXT.(+) & INT.(-)

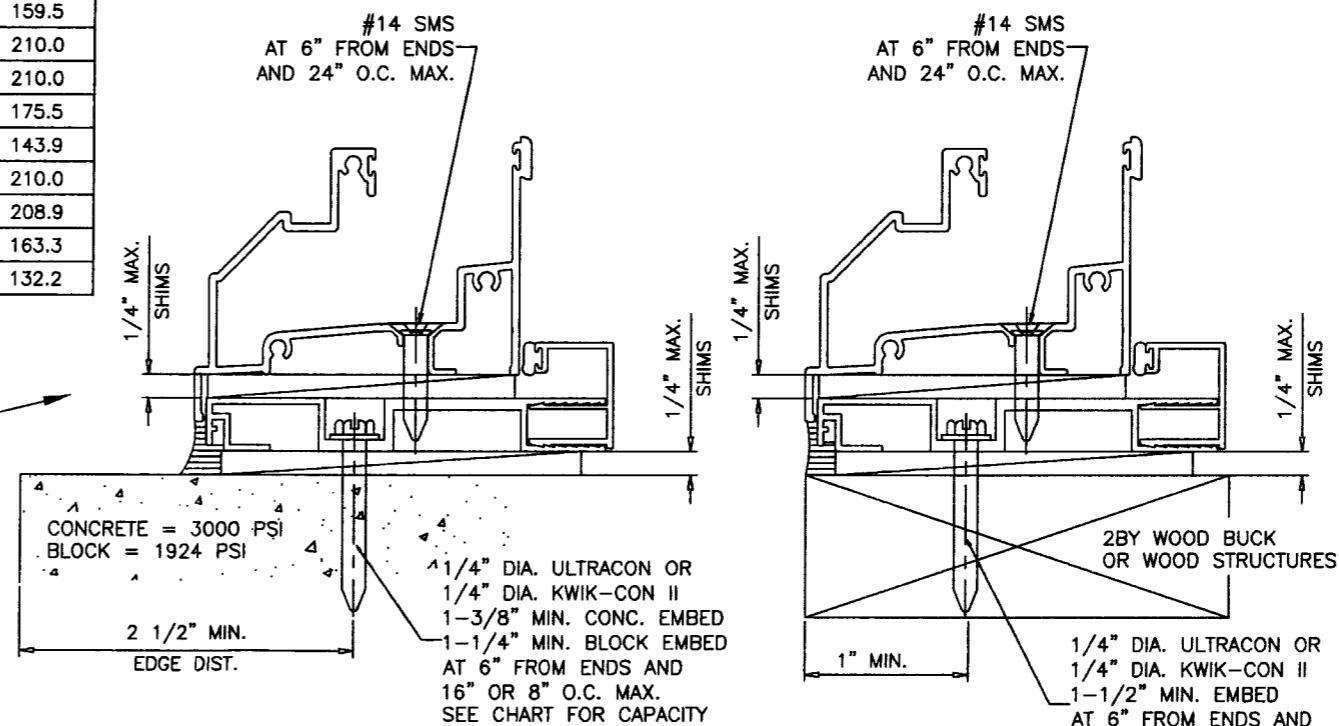
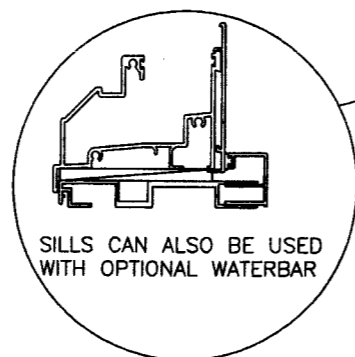
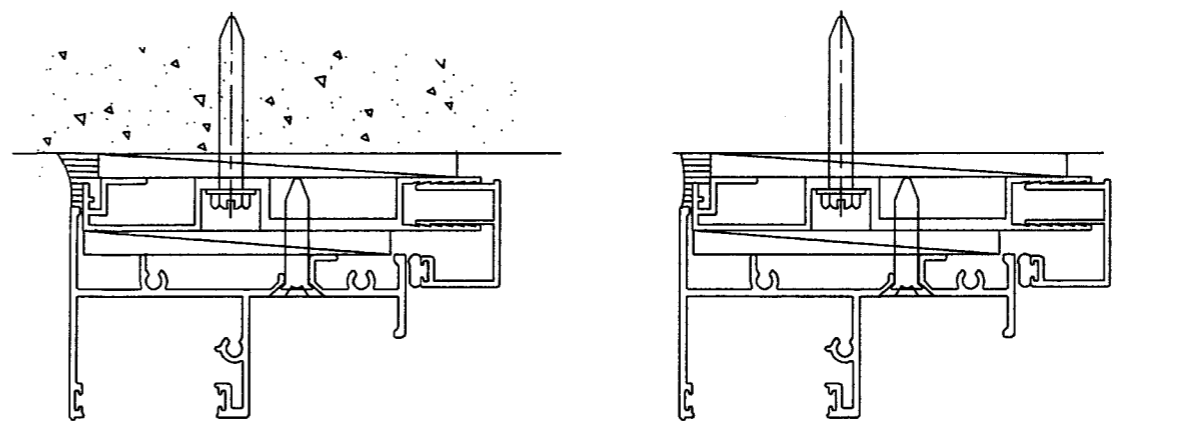
WINDOW DIMS.		ANCHOR SPACING INTO CONC./WOOD		ANCHOR SPACING INTO HOLLOW BLOCK	
WIDTH	HEIGHT	16" O.C.	8" O.C.	16" O.C.	8" O.C.
24"	48"	210.0	210.0	178.7	210.0
30"		210.0	210.0	155.9	210.0
32"		210.0	210.0	150.8	210.0
36"		210.0	210.0	142.9	210.0
42"		205.7	210.0	131.3	204.2
48"		205.7	210.0	131.3	201.0
54"	168.0	210.0	107.2	187.6	
24"	60"	210.0	210.0	134.0	210.0
30"		179.2	210.0	114.3	200.1
32"		171.8	210.0	109.6	191.9
36"		160.0	210.0	102.1	178.7
42"		147.7	210.0	94.2	164.9
48"		140.0	210.0	89.3	156.3
54"	135.8	210.0	86.6	151.6	
24"	72"	210.0	210.0	134.0	210.0
30"		176.8	210.0	112.8	203.1
32"		168.8	210.0	107.7	193.8
36"		155.6	210.0	99.3	178.7
42"		141.2	210.0	90.1	162.2
48"		131.3	210.0	83.8	150.8
54"	124.4	210.0	79.4	142.9	
24"	84"	210.0	210.0	134.0	210.0
30"		175.3	210.0	111.9	186.4
32"		166.8	210.0	106.4	177.4
36"		152.7	210.0	97.5	162.4
42"		137.1	210.0	87.5	145.9
48"		126.0	210.0	80.4	134.0
54"	117.9	196.5	75.2	125.4	
24"	96"	210.0	210.0	134.0	210.0
30"		174.2	210.0	111.2	190.6
32"		165.4	210.0	105.5	180.9
36"		150.8	210.0	96.2	164.9
42"		134.4	210.0	85.8	147.0
48"		122.5	210.0	78.2	134.0
54"	113.6	194.8	72.5	124.3	
24"	108"	183.8	210.0	117.3	210.0
30"		151.7	210.0	96.8	179.8
32"		143.8	210.0	91.8	170.4
36"		130.7	210.0	83.4	154.8
42"		115.9	210.0	73.9	137.3
48"		105.0	195.0	67.0	124.4
24"	120"	186.7	210.0	119.1	210.0
30"		153.6	210.0	98.0	183.8
32"		145.4	210.0	92.8	173.9
36"		131.8	210.0	84.1	157.6
42"		116.4	210.0	74.3	139.2

PERFORMANCE VALUES OF ALUMINUM BUCK INSTALLATION ANCHORS
EXT.(+) & INT.(-)

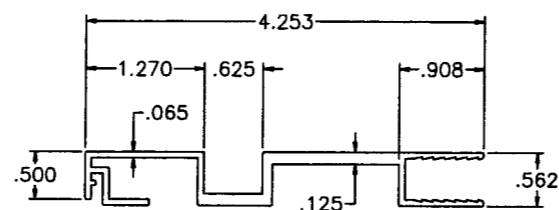
WINDOW DIMS.		ANCHOR SPACING INTO CONC./WOOD		ANCHOR SPACING INTO HOLLOW BLOCK	
WIDTH	HEIGHT	16" O.C.	8" O.C.	16" O.C.	8" O.C.
19-1/8"	26"	210.0	210.0	210.0	210.0
26-1/2"		210.0	210.0	210.0	210.0
37"		210.0	210.0	185.5	210.0
53-1/8"		210.0	210.0	148.0	210.0
19-1/8"	38-3/8"	210.0	210.0	210.0	210.0
26-1/2"		210.0	210.0	173.9	210.0
37"		210.0	210.0	157.4	210.0
53-1/8"		185.8	210.0	118.5	207.4
19-1/8"	50-5/8"	210.0	210.0	196.6	210.0
26-1/2"		210.0	210.0	155.9	210.0
37"		203.5	210.0	129.9	194.8
53-1/8"		171.8	210.0	109.6	180.7
19-1/8"	63"	210.0	210.0	188.8	210.0
26-1/2"		210.0	210.0	146.4	210.0
37"		183.7	210.0	117.2	187.5
53-1/8"		156.2	210.0	99.7	159.5
19-1/8"	72"	210.0	210.0	161.6	210.0
26-1/2"		194.2	210.0	123.9	210.0
37"		152.8	210.0	97.5	175.5
53-1/8"		125.3	210.0	79.9	143.9
19-1/8"	76"	210.0	210.0	151.9	210.0
26-1/2"		181.9	210.0	116.0	208.9
37"		142.1	210.0	90.7	163.3
53-1/8"		115.1	207.3	73.5	132.2

ALUMINUM BUCK FRAMING DETAILS

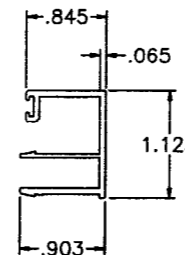
REFER TO SHEETS 3 THRU 9 FOR WINDOW CAPACITIES
USE LOWER APPLICABLE VALUES.



TYPICAL INSTALLATION DETAIL ON ALL FOUR SIDES/USING ALUMINUM BUCK SYSTEM



ALUMINUM BUCK
6063-T6



OPTIONAL COVER
6063-T6

Engr: DR. HUMAYUN FAROOQ
STRUCTURES
FLA. PE # 16557
C.A.N. 3538

AUG 08 2008

PRODUCT REVISED as complying with the Florida Building Code
Acceptance No. 08-0715.15
Expiration Date 05/05/2010
By *Mamad Peraz*
Miami Dade Product Control Division

afC
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
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COMP-ANL\W005-04CGI

ALUMINUM SINGLE HUNG WINDOW (L.M.I.)
CGI WINDOWS & DOORS
10100 N.W. 25TH STREET
MIAMI, FL. 33172
TEL. (305) 593-6590 FAX. (305) 593-6592

no	date	description
A	07.02.08	UPDATED FOR 2007 FBC
B	08.07.08	NO CHANGE THIS SHEET

revisions:
date: 01-28-05
scale: -
dr. by: -
chk. by: -

drawing no.
W05-04

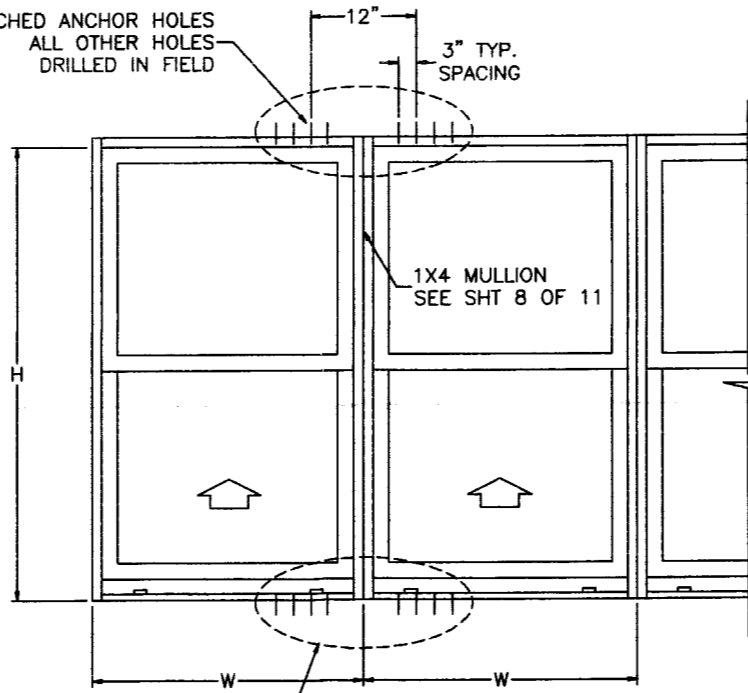
sheet 9 of 10

PERFORMANCE VALUES OF ALUMINUM BUCK INSTALLATION ANCHORS EXT.(+) & INT.(-)									
WINDOW DIMS.		ANCHORS INTO HOLLOW BLOCK				ANCHORS INTO CONC./WOOD			
WIDTH	HEIGHT	CLUSTER OF 2	CLUSTER OF 4	CLUSTER OF 6	CLUSTER OF 8	CLUSTER OF 2	CLUSTER OF 4	CLUSTER OF 6	CLUSTER OF 8
24"	48"	89.3	178.7	210.0	210.0	140.0	210.0	210.0	210.0
30"		78.0	155.9	210.0	210.0	122.2	210.0	210.0	210.0
32"		75.4	150.8	210.0	210.0	118.1	210.0	210.0	210.0
36"		71.5	142.9	210.0	210.0	112.0	210.0	210.0	210.0
42"		68.1	136.1	204.2	210.0	106.7	210.0	210.0	210.0
48"		67.0	134.0	201.0	210.0	105.0	210.0	210.0	210.0
54"	67.0	134.0	201.0	210.0	105.0	210.0	210.0	210.0	
24"	60"	67.0	134.0	201.0	210.0	105.0	210.0	210.0	210.0
30"		57.2	114.3	171.5	210.0	89.6	179.2	210.0	210.0
32"		54.8	109.6	164.5	210.0	85.9	171.8	210.0	210.0
36"		51.0	102.1	153.1	204.2	80.0	160.0	210.0	210.0
42"		47.1	94.2	141.4	188.5	73.8	147.7	210.0	210.0
48"		44.7	89.3	134.0	178.7	70.0	140.0	210.0	210.0
54"	43.3	86.6	129.9	173.3	67.9	135.8	203.6	210.0	
24"	72"	53.6	107.2	160.8	210.0	84.0	168.0	210.0	210.0
30"		45.1	90.3	135.4	180.5	70.7	141.5	210.0	210.0
32"		43.1	86.1	129.2	172.3	67.5	135.0	202.5	210.0
36"		39.7	79.4	119.1	158.8	62.2	124.4	186.7	210.0
42"		36.0	72.1	108.1	144.1	56.5	112.9	169.4	210.0
48"		33.5	67.0	100.5	134.0	52.5	105.0	157.5	210.0
54"	31.8	63.5	95.3	127.1	49.8	99.6	149.3	199.1	
24"	84"	44.7	89.3	134.0	178.7	70.0	140.0	210.0	210.0
30"		37.3	74.6	111.9	149.1	58.4	116.9	175.3	210.0
32"		35.5	70.9	106.4	141.9	55.6	111.2	166.8	210.0
36"		32.5	65.0	97.5	129.9	50.9	101.8	152.7	203.6
42"		29.2	58.3	87.5	116.7	45.7	91.4	137.1	182.9
48"		26.8	53.6	80.4	107.2	42.0	84.0	126.0	168.0
54"	25.1	50.2	75.2	100.3	39.3	78.6	117.9	157.2	
24"	96"	38.3	76.6	114.9	153.1	60.0	120.0	180.0	210.0
30"		31.8	63.5	95.3	127.1	49.8	99.6	149.3	199.1
32"		30.1	60.3	90.4	120.6	47.2	94.5	141.7	189.0
36"		27.5	55.0	82.5	109.9	43.1	86.2	129.2	172.3
42"		24.5	49.0	73.5	98.0	38.4	76.8	115.2	153.6
48"		22.3	44.7	67.0	89.3	35.0	70.0	105.0	140.0
54"	20.7	41.4	62.1	82.9	32.5	64.9	97.4	129.9	
24"	108"	33.5	67.0	100.5	134.0	52.5	105.0	157.5	210.0
30"		27.7	55.3	83.0	110.7	43.4	86.7	130.1	173.4
32"		26.2	52.4	78.7	104.9	41.1	82.2	123.3	164.3
36"		23.8	47.6	71.5	95.3	37.3	74.7	112.0	149.3
42"		21.1	42.2	63.4	84.5	33.1	66.2	99.3	132.4
48"		19.1	38.3	57.4	76.6	30.0	60.0	90.0	120.0
24"	120"	29.8	59.6	89.3	119.1	46.7	93.3	140.0	186.7
30"		24.5	49.0	73.5	98.0	38.4	76.8	115.2	153.6
32"		23.2	46.4	69.6	92.8	36.3	72.7	109.0	145.4
36"		21.0	42.0	63.1	84.1	32.9	65.9	98.8	131.8
42"		18.6	37.1	55.7	74.3	29.1	58.2	87.3	116.4

PERFORMANCE VALUES OF ALUMINUM BUCK INSTALLATION ANCHORS EXT.(+) & INT.(-)									
WINDOW DIMS.		ANCHORS INTO HOLLOW BLOCK				ANCHORS INTO CONC./WOOD			
WIDTH	HEIGHT	CLUSTER OF 2	CLUSTER OF 4	CLUSTER OF 6	CLUSTER OF 8	CLUSTER OF 2	CLUSTER OF 4	CLUSTER OF 6	CLUSTER OF 8
19-1/8"	26"	210.0	210.0	210.0	210.0	210.0	210.0	210.0	210.0
26-1/2"		210.0	210.0	210.0	210.0	210.0	210.0	210.0	210.0
37"		210.0	210.0	210.0	210.0	210.0	210.0	210.0	210.0
53-1/8"		210.0	210.0	210.0	210.0	210.0	210.0	210.0	210.0
19-1/8"	38-3/8"	140.1	210.0	210.0	210.0	210.0	210.0	210.0	210.0
26-1/2"		115.9	210.0	210.0	210.0	181.7	210.0	210.0	210.0
37"		105.0	209.9	210.0	210.0	164.5	210.0	210.0	210.0
53-1/8"		104.8	209.6	210.0	210.0	164.3	210.0	210.0	210.0
19-1/8"	50-5/8"	98.3	196.6	210.0	210.0	154.0	210.0	210.0	210.0
26-1/2"		77.9	155.9	210.0	210.0	122.1	210.0	210.0	210.0
37"		64.9	129.9	194.8	210.0	101.8	203.5	210.0	210.0
53-1/8"		60.2	120.5	180.7	210.0	94.4	188.8	210.0	210.0
19-1/8"	63"	75.5	151.0	210.0	210.0	118.4	210.0	210.0	210.0
26-1/2"		58.5	117.1	175.6	210.0	91.7	183.5	210.0	210.0
37"		46.9	93.8	140.6	187.5	73.5	146.9	210.0	210.0
53-1/8"		39.9	79.7	119.6	159.5	62.5	125.0	187.5	210.0
19-1/8"	72"	64.6	129.3	193.9	210.0	101.3	202.6	210.0	210.0
26-1/2"		49.6	99.2	148.7	198.3	77.7	155.4	210.0	210.0
37"		39.0	78.0	117.0	156.0	61.1	122.2	183.3	210.0
53-1/8"		32.0	64.0	95.9	127.9	50.1	100.2	150.3	200.4
19-1/8"	76"	60.7	121.5	182.2	210.0	95.2	190.4	210.0	210.0
26-1/2"		46.4	92.8	139.2	185.7	72.7	145.5	210.0	210.0
37"		36.3	72.6	108.8	145.1	56.9	113.7	170.6	210.0
53-1/8"		29.4	58.8	88.2	117.6	46.1	92.1	138.2	184.2

PRE PUNCHED ANCHOR HOLES
ALL OTHER HOLES
DRILLED IN FIELD

12" 3" TYP. SPACING

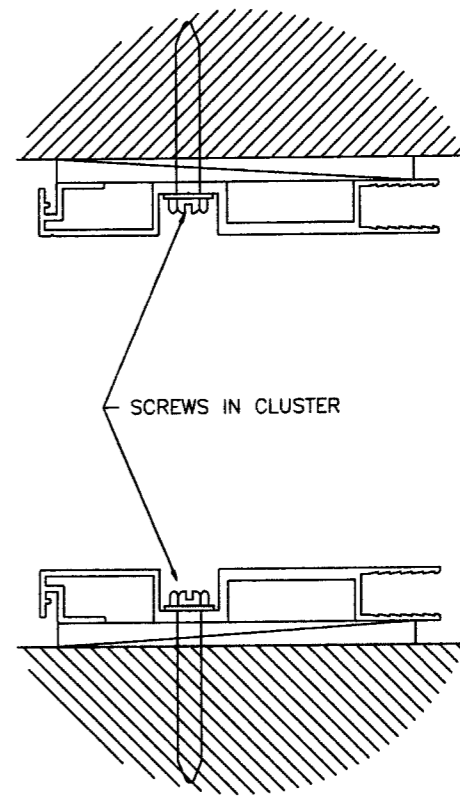


CLUSTER OF 2, 4, 6 OR 8 ANCHORS
(SEE CHARTS ABOVE). ALL OTHER BUCK
ANCHORS AS PER SHEET 9.
(CLUSTER OF 8 BEING SHOWN)

NOTE: ALUMINUM BUCKS ARE SUPPLIED WITH
CLUSTER OF 2 (1 SCREW HOLE PER SIDE) STANDARD.
EXTRA HOLES MUST BE FIELD DRILLED IF REQUIRED.

ANCHORS AT ALUMINUM BUCK FRAMING (AT MULLION ENDS)

FOR WINDOW ANCHORING TO
ALUMINUM BUCKS USE #14 SCREWS
SPACED AS PER SHEETS 7 & 8.



ANCHORS MIN. EDGE DIST. = 2-1/2 IN.

Engr: DR. HUMAYOUN FAROOQ
STRUCTURES
FLA. PE # 18537
C.A.N. 3538

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 08-071515
Expiration Date 05/05/2010

By *Wamun Pers*
Miami Dade Product Control
Division

AUG 08 2008

af c
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COMP-ANL W005-04CGI

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CGI WINDOWS & DOORS
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MIAMI, FL. 33172
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no.	date	by	description
A	07.02.08		UPDATED FOR 2007 FBC
B	08.07.08		REV. PER BCC COMMENTS

date:	01-28-05
scale:	-
dr. by:	-
chk. by:	-

drawing no.
W05-04
sheet 10 of 10